

# Perceptions of a Required Hospice Experience: A Comparison of First- and Fourth-Year Medical Students

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## Abstract

*As more attention is focused on the need to improve end-of-life care, medical schools are expanding curricula in this area. This paper presents information about a 12-week, 60-hour hospice unit required for first-year medical students between 1989 and 2001, along with a comparison of first- and fourth-year students' perceptions of this unit. Surveyed in summer of 2001 were 111 individuals who had completed the unit: 59 students who had completed the hospice unit in the 2000-01 academic year and 52 graduating students who had completed the hospice unit in the 1997-98 academic year. The survey tapped perceptions of usefulness of the unit, comfort with end-of-life-care knowledge and skills, and suggestions for improvement. Ninety percent of graduating students rated the hospice experience as personally valuable and 81% acceded its important for medical education, compared to 69% and 65% of first-year students, respectively. Almost all felt that the hospice unit was a useful experience for them as future clinicians. However, there were few differences in comfort with end-of-life skills between the two classes, e.g., almost 90% felt comfortable listening to patients; about 50% felt comfortable with their knowledge of grief/bereavement, symptom control, physical needs and psychosocial needs; and only 25% felt comfortable discussing a patient's terminal illness with the patient and family. The majority of students felt the unit should remain a first-year requirement, but wanted more opportunities to attend dying patients, work with physician role models, and reflect on their experience with death and its meaning.*

## Introduction

The need to improve care provided to the dying has become a topic of public interest and professional attention over the last 30 years.<sup>1</sup> However, findings from US studies investigating medical school curricula, residency training, and opinions of medical students have identified shortcomings in education in end-of-life care.<sup>2-3</sup> For example, of the 125 medical schools accredited by the Liaison Committee on Medical Education in 1998, only 24 medical schools

(19% of total) required a course in end-of-life care or a clerkship in a setting specializing in care of the terminally ill. Among 13,861 students responding to a 1998 survey, 29% felt that instruction in death and dying was inadequate, and 66% felt that instruction in pain management was inadequate.<sup>2</sup>

A number of medical schools are enhancing their educational offerings in end-of-life care, and the literature includes several reports of courses and rotations focused on caring for the terminally ill. For example, a study from the University of Maryland reported positive responses to a 16-hour module required of third-year students that combined lectures, discussion, rounds with a hospice nurse, and case presentations.<sup>4</sup> Students completing a first-year elective in death education at the Hahnemann School of Medicine in Philadelphia demonstrated improved attitudes toward caring for terminally ill patients compared to a control group, and these improved attitudes were sustained over their four years in medical school.<sup>5</sup> Researchers at the University of North Dakota reported improved attitudes toward end-of-life care among third-year students participating in a five-day combined didactic and clinical rotation in hospice and palliative care.<sup>6</sup> Similarly, attitudes of fourth-year students were positively affected by a required 16-hour hospice rotation at Texas Tech University,<sup>7</sup> and graduates of a University of Colorado hospice elective surveyed several years later agreed that the experience was helpful in working with dying patients encountered in their residencies and practices.<sup>8</sup>

The purpose of this study was to test the hypothesis that fourth-year students were more appreciative than first-year students of the 12-week hospice unit required of all first-year students at the John A. Burns School of Medicine (JABSOM). This was measured by asking whether the experience was important for their medical education, was personally valuable, and whether it would help the student provide better care to patients. We also explored whether the unit should be required in a different year of school or should be modified in other ways. These inquiries stemmed from students' comments about their experiences, with fourth-year students reporting growing regard for the unit over time. We also compared the two student groups in their levels of comfort with end-of-life-care knowledge and skills.

## Required Hospice Unit

Between 1989 and 2001, all first-year students at JABSOM were required to complete a 12-week, 60-hour hospice unit. Specific objectives for the hospice experience were to: 1) understand physi-

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cal, emotional, psychosocial, and spiritual needs of terminally ill patients and their caregivers, 2) develop active listening and communication skills, 3) recognize and cope with personal reactions to terminal illness and death, and 4) manage clients' feelings of grief and bereavement.<sup>9</sup> Cooperative agreements were held with both hospices in Honolulu, although students could choose to work with a hospice in another county or state. Students completed the standard training program offered by the hospice (averaging 12 hours), after which they functioned as hospice volunteers. As such, they were assigned to at least one dying patient who they were expected to visit four hours a week. Like other volunteers, students communicated regularly with the agency's volunteer coordinator. At the end of the unit, students prepared a one-page report describing an incident that affected them or commenting on the unit in relationship to community health.<sup>9</sup> Difficulties in meshing the hospice and JABSOM schedules led to the discontinuation of the hospice requirement for the students entering JABSOM in Fall 2001.

The hospice unit was one of three, 12-week units required under JABSOM's Primary Care and Community Medicine Program for first-year students. This program was established to encourage students to see a "bigger picture" of medicine by placing them in community-based health and social service agencies, to adopt a biopsychosocial model of assessing health, and to develop their understanding of the roles of environment and public policy in primary care.<sup>9</sup> At JABSOM, the pre-clinical program adheres to a problem-based learning (PBL) approach in which students work in small groups to solve complex patient cases.<sup>10</sup>

## Methods

The project was approved by the university's Institutional Review Board, and consent to participate was obtained from 100% of students completing their first (n=59) and fourth (n=52) years of medical school in 2001. First-year students had completed the hospice unit during the 2000-01 academic year, and fourth-year students had completed it during the 1997-98 academic year. The 32-item survey solicited socio-demographic data (gender, ethnicity, age, specialty interest, completion of advance directive, discussion of end-of-life wishes with parents, past experiences with terminally ill patients and death); perceptions of the value, usefulness, and importance of the unit (on a 5-point Likert scale); perceptions of comfort with knowledge and skills outlined in the hospice unit objectives (on a 5-point Likert scale; see Table 3 for a list of items); and suggestions for improvement. Surveys were completed during class time, and responses were anonymous. Data were analyzed using a computer-based statistical package called SPSS.<sup>11</sup>

## Results

**Participants.** Respondent characteristics are provided in Table 1. The mean age of first-year students was 26 years (range 22-51), compared to 28 years for fourth-year students (range 25-38). About 60% of the first-year class and 50% of the fourth-year class was male. Overall, about 25% of medical students had cared for terminally ill patients, and 75% had dealt with death personally prior to their hospice experience. About 94% of the fourth-year students reported caring for terminally ill patients during their clinical years. Out of both classes, only 5 students had completed advance directives.

Table 1.— Student Demographics and Experience with Death and Dying.

	First-Year Students (n=52)	Fourth-Year Students (n=58)
Mean age	26.5 (range 22-51)	28.1 (range 25-38)
Male gender	31 (60%)	29 (50%)
Experience with death and dying:		
Cared for terminally ill pts prior to hospice training	15 (29%)	12 (21%)
Dealt with death personally prior to hospice training	39 (75%)	43 (75%)
Cared for terminally ill patients during clinical training	n.a.	55 (94%)

**Perceptions of the Hospice Experience.** As shown in Table 2, between 60% and 70% of the first-year students agreed that the hospice experience was important for medical education, found it personally valuable, and thought it would help them to provide better end-of-life care. As hypothesized, a greater proportion of fourth-year students (between 80% and 90%) agreed with these statements, and these differences were statistically significant. However, similar proportions of first- and fourth-year students agreed that the hospice unit would be useful to them as future clinicians (81% and 90%, respectively).

Table 2.— Perceptions of the Hospice Experience in First- and Fourth-Year Medical Students.

	First-Year Students (n=52)	Fourth-Year Students (n=58)
The hospice rotation is important for medical education.	34 (65%)	47 (81%)*
The hospice experience was valuable to me.	36 (69%)	52 (90%)*
The hospice rotation will help me to provide better end-of-life care to my patients.	31 (60%)	49 (85%)*
The hospice rotation will be useful to me as future clinician.	42 (81%)	52 (90%)

\*p < .01

**Comfort with Knowledge and Skills.** With a few exceptions, students' ratings of their comfort with end-of-life knowledge and skills were disappointing. Mean scores on most items were between 3.0 and 3.5, signifying that students felt neither comfortable nor uncomfortable in these areas. Counting the number of students who felt they were comfortable or very comfortable with an item (i.e., rating the item a "4" or "5"), 90% of first-year and 86% of fourth-year students felt comfortable listening to patients, and 71% of fourth-year students felt comfortable with grief and bereavement process (compared to 44% of first-year students,  $p < .05$ ). However, 50% or less of the students in either class rated themselves comfortable with the three other knowledge items: understanding the spiritual, emotional, and psychosocial needs of the dying; understanding the physical needs of dying patients; and understanding symptom and pain management. About half of each class felt comfortable recognizing and coping with personal reactions to illness and death. But, only about 20% of first-year and about 30% of fourth-year students felt comfortable discussing the seriousness of the illness with patients and families, and only 30% to 40% of each class felt comfortable discussing advance directives and do-not-resuscitate orders. In response to a question about which issues they became more aware of as a result of their hospice experience, 60% or more of each class mentioned the importance of respecting patient autonomy, managing pain and symptoms, and considering spiritual and cultural values when caring for the dying (not shown in table).

**Suggestions for Improvement.** Only 10% of each class felt that the unit should be moved to the clinical-training years, and 81% of first-year and 65% of fourth-year students felt it should remain a first-year requirement. However, students offered several suggestions for improving the unit (Table 4). Foremost was a call for more involvement of physicians as palliative-care role models that students could shadow and confer with. About a third also wanted more formal training in palliative care from these experts. About half of the students in each class recommended more contact with hospice patients and families, e.g., through more intense contact during the rotation, requiring students to continue as hospice volunteers throughout their four years of school, or revisiting hospice during the fourth year. Finally, students wanted more opportunity to discuss and reflect on end-of-life issues, e.g., by featuring dying patients in more of the cases discussed in problem-based learning tutorials and requiring students to complete their own advance directives and to discuss advance directives with their parents.

## Discussion

Findings suggest that students appreciated the hospice unit, and believed it should remain a requirement of pre-clinical training. It is in these years that students develop their basic knowledge, attitudes, and skills related to end-of-life care.<sup>12</sup> As noted in a 1997 literature review, it is very difficult to change physicians' end-of-life-care behaviors once they are practicing on their own.<sup>13</sup> Thus, it is important that palliative care education be provided early in a student's training, and the subjects in this study agreed with this view.

Compared to first-year students, however, a greater proportion of fourth-year students believed the unit was important for medical education, was personally valuable, and would help them provide

Table 3.— Self-Rated Comfort with End-of-Life Knowledge and Skills in First- and Fourth-Year Medical Students

	Mean score *		N (%)†	
	1st-Yr (n=58)	4th-Yr (n=52)	1st-Yr (n=52)	4th-Yr (n=58)
How comfortable are you with...				
Listening to patients	4.4	4.4	47 (90)	50 (86)
Familiarity with grief and the bereavement process	3.4	3.8	23 (44)	41 (71) ‡
Understanding spiritual, emotional, and psychosocial needs of dying patients	3.4	3.5	26 (50)	26 (45)
Understanding the physical needs of dying patients	3.4	3.3	26 (50)	22 (38)
Understanding symptom and pain management	3.4	3.3	21 (40)	25 (43)
Recognizing and coping with personal reactions to illness and death	3.4	3.4	26 (50)	26 (45)
Discussing advance directives and do-not-resuscitate orders	3.0	3.0	16 (31)	23 (40)
Discussing the seriousness of the illness with the family	3.1	3.1	12 (23)	19 (33)
Discussing the seriousness of the illness with the patient	3.0	3.0	10 (19)	17 (29)

\* Scored on a 5-point Likert scale from 1=not comfortable to 5=very comfortable

† Number and percent that responded to the item with a "4" or "5"

‡ The difference between first-year and fourth-year students is significant ( $p < .05$ )

better end-of-life care, as hypothesized. This is likely due to the expanded experiences of graduating students, who had 3 more years of exposure to end-of-life issues in classroom, PBL, and clinical training (e.g., our survey found that 94% of the fourth-year students had cared for at least one terminally ill patient in their 3<sup>rd</sup> or 4<sup>th</sup> year).

Table 4.— Recommendations for Improving the Hospice Rotation by First- and Fourth-Year Medical Students

	First-Year Students (n=52)	Fourth-Year Students (n=58)
Move the required hospice rotation to the clinical years (years three or four).	5 (10%)	6 (10%)
Increase contact with dying patients and their families.	26 (50%)	30 (52%)
Increase involvement of physician specialists and experts in end-of-life care to:		
Allow more shadowing and discussion of cases.	55 (68%)	16 (31%)
Provide more formal training and lectures.	38 (66%)	32 (55%)
Increase opportunities for discussion and reflection:		
More PBL cases featuring dying patients.	14 (27%)	9 (17%)
Require students to complete their own advance directives and to discuss advance directives with parents.	30 (52%)	20 (34%)

Despite their appreciation for the experience, students did not report high levels of comfort with end-of-life knowledge and skills either at the end of their hospice unit or three years later when graduating from medical school. In fact, the first-year hospice unit was simply a lay-hospice experience. Although this provided a good introduction to hospice and end-of-life issues, it was unrealistic to expect that this experience would result in student mastery of all items listed in Table 3.<sup>1,14</sup> Coupled with the suggestions of JABSOM students for greater contact with dying patients, more opportunities for reflection, and increased involvement of physician role model experts in end-of-life care, these findings suggest a need for additional structured experiences in end-of-life care in the clinical years.

As JABSOM continues to revamp its curriculum, faculty may want to consider reinstating the first-year hospice unit. Additionally, they should continue incorporating learning opportunities related to end-of-life care throughout the four-year curriculum, encouraging students in the development of positive attitudes toward dying patients, providing ample opportunity to work directly with dying patients and their families, supporting faculty who want

to seek certification in palliative care, and assigning students to clinical professors that offer excellent medical care to dying people and find meaning in this work.<sup>1, 3-8, 14</sup>

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